Fall 2013 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0002 Sutter Maintenance Yard East Levee	Overall LMA Rating	Total LMA Miles						
Sutter Bypass	Α	22.12						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design & System Obsolescence	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments						0.01		
Animal Control	0.01		0.01	0.05%				
Supplemental								
USACE Erosion Survey	0.03		0.03	0.14%				
DWR UCIP Field Study					0.37			
LMA Totals:	0.04	0.00	0.04	0.18%	0.37	0.01	0.00	0.00

LMA District Cover Sheet

Fall 2013 Levee Inspection Results

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)				
* Overall LMA Rating (Fall Only)		A						
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effec	ct overall annual rating				
* SPRING INSPECTIONS: Overall maintenance deficiencies are rated FALL INSPECTIONS: The overall maintenan within the attached un	I using the same crite nce rating shown abo	ria in the spring and in ve is based on operat	the fall.	ficiencies identified				
Comments								

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles
Unit No. 01 Sutter Bypass Levee	Left	22.12

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	03/21/2013 - 03/21/2013		10/08/2013 - 10/08/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

LMR No.	Levee		Category	Item	Location	Rating	Action/Comment		GPS Latitude/		Issue No. Photo
1	Start	End	Earthen Levee	Operations & Maintenance Manuals	LS	A Ma			Start o DWR ID: DWR_ST00	End 0	4
2			Earthen Levee	Emergency Supplies & Equipment	LS	A Ma			DWR ID: DWR_ST00	0	5
3			Earthen Levee	Flood Preparedness & Training	LS	A Ma			o o DWR ID: DWR_ST00	o o 02_01_s _ 2013_6	6
4	0.33	0.33	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6504 EP_NO: 4795 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Unable to locate any inc crossing. More research may be necessa FIELD_STRUCT_DESC: 3-inch gas line a landward toe. (extension of App. No. 4795 FS Date: 10/8/2012 8:06:00 AM	ry. along the	-121.828716°-12		
5	0.33	0.33	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13732 EP_NO: 4795 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Unable to locate any inc crossing. More research may be necessa Same as last inspection. Unable to locate FIELD_STRUCT_DESC: 3-inch gas line a landward toe. (extension of App. No. 4795 FS Date: 5/22/2013	ary5/22/201 e. along the	-121.828716° -12	9.147463 ° 1.828716 °	329
6	1.13	1.13	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13736 EP_NO: 10932 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pier has no walkway to on pier. This is not necessarily an issue.5 24in. cmp riser on WS shoulder is full of g and should be cleaned out to inspect siphe FIELD_STRUCT_DESC: 16-inch steel pip levee, 6.3 feet below the crown. Vertical p on a steel structure on the bank. Siphon b inch corrugated metal pipe riser on the wa Concrete distribution box on the landward shoulder. Original Equipment in O+M. Re (App. 10932-Nall) Hand drawings available FS Date: 5/22/2013	5/22/2013 parbage and on breaker. be through to breaker in a aterward slo side. JP o eplaced und	-121.816644 ° -12 mp d dirt he tted 24- ppe. n WS der	9.140868 ° 1.816644 °	330 Y

* Location

LS : Land Side

WS : Water Side

CR : Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

				5111C110. 01 0d		- 7				10/08/2013	Бипе	y
LMR No.	Levee	Mile	Category	Item	Location	Rating ** +	Action/Comment			GPS Latitude/L	ongitude End	Issue No. Photo
7	3.60		Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burro backfill and compact or grout burrows.	ws visible	; need to		9.120422 ° 1.779907 °	7 Y
8	3.61	3.61	Supplementa	DWR UCIP Field Study	LS		Inspector Comments: FS_ID:6514 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flap gates left in oper to determine type of abandonment for cc Contact inspector to determine type of a FIELD_STRUCT_DESC: 1 of 2. 4-foot l box culvert through the levee, 30.0 feet l Slide gate in concrete well on the landwa Wood flap gate and concrete headwall of end. Abandoned State pumping plant or side. Originally installed under O+M. FS Date: 10/8/2012 8:43:52 AM	oncrete cubandonm by 6-foot of below the ard should on the wat	ulverts. ent. concrete crown. der. erward	39.120372 ° 3 -121.779800 ° -12	1.779800°	
9	3.61	3.61	Supplementa	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13742 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flap gates left in oper to determine type of abandonment for co Contact inspector to determine type of abandonment.5/22/2013 Concrete culve as gravity drain for LS ditch. FIELD_STRUCT_DESC: 1 of 2. 4-foot I box culvert through the levee, 30.0 feet I Slide gate in concrete well on the landwa Wood flap gate and concrete headwall of end. Abandoned State pumping plant or side. Originally installed under O+M. FS Date: 5/24/2013 10:06:10 AM	ert is bein by 6-foot of below the ard should on the wat	Unable ulverts. g used concrete crown. der. erward	39.120372 ° 3 -121.779800 ° -12	9.120372 ° 1.779800 °	332 Y
10	3.61	3.61	Supplementa	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6515 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flap gates in open po determine type of abandonment. Conta determine abandonment. FIELD_STRUCT_DESC: 2 of 2. 4-foot I box culvert through the levee, 30.0 feet I Slide gate in concrete well on the landwa Wood flap gate and concrete headwall of end. Abandoned State pumping plant or side. Originally installed under O+M. FS Date: 10/8/2012 8:52:31 AM	ct inspect by 6-foot of below the ard should on the wat	or to concrete crown. der. erward	39.120358 ° 3 -121.779775 ° -12	1.779775°	

Location	
LS : Land Side	
WS : Water Side	
CR : Crown	

Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

				Wa	aterwa	ay		Bank	Unit Miles	Inspection Start/End	Inspec	ctor
			ι	Jnit No. 01 Su	tter	Вур	ass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffe	
	Levee	Mile End	Category	Item	Location *	Rating	Action/Comment			GPS Latitude/L	Longitude End	Issue No. Photo
	3.61	3.61	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13743 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flap gates in open podetermine type of abandonment. Contadetermine abandonment.5/22/2013 Colbeing used as gravity drain for LS ditch. FIELD_STRUCT_DESC: 2 of 2. 4-foot box culvert through the levee, 30.0 feet Slide gate in concrete well on the landw Wood flap gate and concrete headwall of end. Abandoned State pumping plant of side. Originally installed under O+M. FS Date: 5/22/2013	ct inspec ncrete cu by 6-foot below the ard shoul on the wa	eed to tor to lvert is concrete crown. der. terward	39.120358 ° 3: 121.779775 ° -12		
12	4.97	4.99	Earthen Levee	Animal Control	LS	A Ma	A1 : Exterminate rodents and backfill argrout burrows.	id compa		39.107193 ° 39.107193 ° -12 121.761777 ° -12 DWR ID: DWR_ST000		Υ
13 1	0.44	10.44	Supplemental	DWR UCIP Field Study	LS		Inspector Comments: FS_ID:13766 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 5/22/2013 Carsonite shoudler is broken and should be replac FIELD_STRUCT_DESC: 1 of 3. 4.5-incl pipelines through the levee installed 2 fc crown. Pipes were paced in same trenc Gasline markers on LS toe and WS sho drawings available in the permit. FS Date: 5/22/2013	ed. h Natural eet below ch 1-foot a	n WS gas the apart.	39.033522 ° 3: 121.728927 ° -12		
14 1	10.44	10.44	Supplemental	DWR UCIP Field Study	LS		Inspector Comments: FS_ID:13767 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 5/22/2013 Carsonite	marker o		39.033519 ° 3 121.728926 ° -12	9.033519 ° 1.728926 °	

Location	
LS : Land Side	
WS : Water Side	
CR : Crown	

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

DWR ID: DWR_ST0002_01_f _ 2013_336

shoulder is broken and should be replaced. FIELD_STRUCT_DESC: 2 of 3. 4.5-inch Natural gas pipelines through the levee installed 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers on LS toe and WS shoulder. Design

drawings available in the permit.

FS Date: 5/22/2013

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Wa	aterway		Bank	Unit Miles	Inspection Start/End	Inspect	tor
Unit No. 01 Su	tter Byp	ass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffe	
Levee Mile Start End Category Item	Rating ** + Location *	Action/Comment			GPS Latitude/L	Longitude	Issue No. Photo
15 10.44 10.44 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:13763 EP_NO: 14455 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 5/22/2013 Carsonite shoulder is broken and should be replac FIELD_STRUCT_DESC: 3 of 3. 4.5-incl pipelines through the levee installed 2 fc crown. Pipes were paced in same trenc Gasline markers on LS toe and WS sho drawings available in the permit. FS Date: 5/22/2013	ed. h Natural eet below ch 1-foot a	n WS gas the apart.	39.033517 ° 3: -121.728925 ° -12		337 Y
16 10.89 10.92 Supplemental USACE Erosion Survey	WS M	Inspector Comments: 2011 - Small sect levee slope has eroded from wind wave of the extended inventory, last inspected ID: SBP_11-1_L]	. 2012: Si	te is part		9.024399 °	1
17 11.00 11.00 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:13806 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine ty, abandonment.5/22/2013 Same as last FIELD_STRUCT_DESC: 1 of 5. 4-foot box culvert through the levee, 31.5 feet Wood flap gate and concrete headwall of end. Wooden steps on the landward slot steps on the waterward end. Originally O+M Manual. FS Date: 5/22/2013	inspection by 6-foot below the on the wa ope. Con	n. concrete crown. terward crete	39.025693 ° 3: -121.726895 ° -12		
18 11.00 11.00 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:8863 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Determine type of aba FIELD_STRUCT_DESC: 2 of 5. 4-foot		nt.		9.025683 °	

* Location

LS: Land Side

WS: Water Side

CR: Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma · Mainter

box culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterward end. Wooden steps on the landward slope. Concrete steps on the waterward end. Originally included in the

FS Date: 10/8/2012 2:15:00 PM

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

DWR ID: DWR_ST0002_01_f _ 2013_339

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Wa		Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Su	tter Byp	ass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey
Levee Mile Category Item	Rating ** + Location *	Action/Comment			GPS Latitude/L	ongitude Issue No. End Phot
19 11.00 11.00 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6575 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type abandonment. FIELD_STRUCT_DESC: 1 of 5. 4-foot box culvert through the levee, 31.5 feet Wood flap gate and concrete headwall cend. Wooden steps on the landward slotsteps on the waterward end. Originally in O+M Manual. FS Date: 10/8/2012 2:09:00 PM	by 6-foot below the on the wa ope. Con	concrete crown. terward crete	121.726895° -12	
²⁰ 11.00 11.00 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:13772 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type abandonment.5/22/2013 Same as last FIELD_STRUCT_DESC: 1 of 5. 4-foot box culvert through the levee, 31.5 feet Wood flap gate and concrete headwall of end. Wooden steps on the landward slot steps on the waterward end. Originally in O+M Manual. FS Date: 5/24/2013 10:25:10 AM	inspection by 6-foot below the on the war	n. concrete crown. terward crete	DWR ID: DWR_ST000 39.025693 ° 3 121.726895 ° -12	9.025693 ° 341
		1 0 Bate. 0/2-4/2010 10:20:10 / tivi			DWR ID: DWR_ST000	
²¹ 11.00 11.00 Supplemental DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6574 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Determine type of aba FIELD_STRUCT_DESC: 2 of 5. 4-foot box culvert through the levee, 31.5 feet Wood flap gate and concrete headwall of end. Wooden steps on the landward slot steps on the waterward end. Originally if O+M Manual. FS Date: 10/8/2012 2:15:46 PM	by 6-foot below the on the wa ope. Con	nt. concrete crown. terward crete	39.025715 ° 3: 121.726818 ° -12	

DWR ID: DWR_ST0002_01_f _ 2013_342

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Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

		Wa	terway		Bank	Unit Miles	Inspection Start/End	Inspec	tor
	ι	Jnit No. 01 Sut	ass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffe		
Levee Mile So Start End	Category	Item	Rating ** + Location *	Action/Comment			GPS Latitude/	_ongitude	Issue No. Photo
22 11.00 11.00	Supplemental	DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:13773 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Determine type of abandonment.5/22/2013 Same as last i FIELD_STRUCT_DESC: 2 of 5. 4-foot box culvert through the levee, 31.5 feet b Wood flap gate and concrete headwall o end. Wooden steps on the landward slo steps on the waterward end. Originally i O+M Manual. FS Date: 5/22/2013	by 6-foot below the in the wal pe. Con-	n. concrete crown. terward crete		9.025683 ° 1.726886 °	343
23 11.00 11.00	Supplemental	DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6576 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine typabandonment. FIELD_STRUCT_DESC: 3 of 5. 4-foot box culvert through the levee, 31.5 feet to Slide gate in concrete well on the waterw Wood flap gate and concrete headwall of end. Wooden steps on the landward slosteps on the waterward end. Originally in O+M Manual. FS Date: 10/8/2012 2:20:44 PM	by 6-foot below the ward shou in the war ipe. Con	concrete crown. ulder. terward crete	39.025673 ° 3.121.726873 ° -12	1.726873°	
24 11.00 11.00	Supplemental	DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6577 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine typ abandonment. FIELD_STRUCT_DESC: 4 of 5. 4-foot box culvert through the levee, 31.5 feet the Slide gate in concrete well on the waterw Wood flap gate and concrete headwall of end. Wooden steps on the landward slo	by 6-foot below the vard shou in the wat	concrete crown. ılder. terward	39.025656° 3 121.726878° -12	9.025656 ° 1.726878 °	345

* Location LS: Land Side WS: Water Side CR: Crown ** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

O+M Manual.

FS Date: 10/8/2012 2:34:34 PM

+ Issue Type
Ma · Mainter

steps on the waterward end. Originally included in the

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement DWR ID: DWR_ST0002_01_f _ 2013_345

Levee Inspection Report By Mile - Fall 2013

Field Study En EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment. FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 - DWR). Minimalistic design drawings available.	Photo 346
Start End Category Mem Start End End Start End Start End Start End Start End Start End Start	No. Photo
Field Study En EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment for pipe. FIELD_STRUCT_DESC: 5 of 5. 4-foot by 6-foot concrete box culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterward shoulder. Wood flap gate and concrete headwall on the waterward end. Wooden steps on the landward slope. Concrete steps on the waterward end. Originally included in the O+M Manual. FS Date: 10/8/2012 2:37:08 PM DWR ID: DWR_ST0002_01_f. WS M Inspector Comments: FS_ID:6579 EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment. FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 - DWR). Minimalistic design drawings available.	
26 11.01 11.01 Supplemental DWR UCIP Field Study WS M Inspector Comments: FS_ID:6579 EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment. FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 - DWR). Minimalistic design drawings available.	
Field Study En EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment. FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 - DWR). Minimalistic design drawings available.	2013_346
FS Date: 10/8/2012 2:39:16 PM	
27 11.01 11.01 Supplemental DWR UCIP WS M Inspector Comments: FS_ID:13777 39.025560 ° 39.025	2013_347 660 ° 348
Field Study En EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment.5/22/2013 Same as last inspection. FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 - DWR). Minimalistic design drawings available. FS Date: 5/22/2013	
28 13.13 13.13 Supplemental DWR UCIP Field Study WS M Inspector Comments: FS_ID:6580 EP_NO: 15571 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to determine status of pipeline. Unable to locate any markers in field. FIELD_STRUCT_DESC: 10.75-IN. STEEL GAS PIPELINE 2 feet below the levee crown. Permit #15571. Design drawings are available. FS Date: 10/9/2012 2:57:38 PM DWR ID: DWR_ST0002_01_f.	104° 349

Levee Inspection Report By Mile - Fall 2013

					Increation		
Water	Bank	Unit Miles	Inspection Start/End	Inspecto	or		
Unit No. 01 Sutte	Left	22.12	10/08/2013 10/08/2013	Bob Duffey			
Levee Mile Category Item *	Rating ** + Location	Action/Comment			GPS Latitude/L	.origitude	No.
Start End Category Item	on + G				Start	Liiu	Photo
²⁹ 13.13 13.13 Supplemental DWR UCIP William Field Study	WS M Inspector Comments: FS_ID:13781 38.996304 ° 38 En EP_NO: 15571 - 121.716290 ° -12 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to determine status of pipeline. Unable to locate any markers in field.5/23/2013 Same as last inspection. Unable to locate. FIELD_STRUCT_DESC: 10.75-IN. STEEL GAS PIPELINE 2 feet below the levee crown. Permit #15571. Design drawings are available. FS Date: 5/23/2013			1.716290 °	350		
30 13.54 13.54 Supplemental DWR UCIP Field Study	VS M En	Inspector Comments: FS_ID:13782 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Verify work (if any) wa original equipment with inspector.5/23/20 last inspection. FIELD_STRUCT_DESC: 18-inch pipe th 5.5 feet below the crown. Pipe measure pump and on LS outlet. Siphon breake corrugated metal pipe riser on the landw on pile structure in the channel. Meter a bank. Originally included in O+M manua FS Date: 5/23/2013	on Samurough the same of the s	o replace ne as e levee, hes at inch e. Pump	38.991808° 3i 121.711512°-12°	3.991808 ° 3 1.711512 °	351
31 13.54 13.54 Supplemental DWR UCIP Field Study		Inspector Comments: FS_ID:6600 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Verify work (if any) wa original equipment with inspector. FIELD_STRUCT_DESC: 18-inch pipe th 5.5 feet below the crown. Pipe measure pump and on LS outlet. Siphon breaker corrugated metal pipe riser on the landw on pile structure in the channel. Meter a bank. Originally included in O+M manua FS Date: 10/9/2012 2:58:47 PM	irough the es 16-inc r in a 16- rard slope and pole o	o replace e levee, hes at inch e. Pump	DWR ID: DWR_ST0000 38.991808 ° 38.121.711512 ° -12	3.991808 ° 3 1.711512 °	352 Y

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway						Unit Miles	Inspection Start/End	Inspec	ctor
Unit No. 01 Sutter Bypass Levee						22.12	10/08/2013 10/08/2013	Bob Duffe	
Levee M	ile Category	Item	Rating ** + Location *	Action/Comment			GPS Latitude/I	ongitude	NO.
Start E	nd ,		on + G				Start	End	Photo
32 14.70 14	3.70 Supplementa	al DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:13783 EP_NO: 1674 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe exposed on WS heavy oil usage that may be a problem a pier.5/23/2013 Same as last inspection FIELD_STRUCT_DESC: 24-inch steel p levee, 4.0 feet below the crown. Siphon inch PVC pipe riser on the landward sho concrete standpipe in field on the landward pump on a steel pile structure in the cha Etcheverry). Minimal design drawings a FS Date: 5/23/2013	at pump of the pum	ad and on gh the n an 18- 4-inch Vertical	38.981286 ° 3 121.694958 ° -12		
33 14.70 14	.70 Supplementa	al DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6601 EP_NO: 1674 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe exposed on WS heavy oil usage that may be a problem a FIELD_STRUCT_DESC: 24-inch steel p levee, 4.0 feet below the crown. Siphon inch PVC pipe riser on the landward sho concrete standpipe in field on the landw pump on a steel pile structure in the cha Etcheverry). Minimal design drawings a FS Date: 10/9/2012 3:04:26 PM	at pump on the pump of the pum	ad and on pier. gh the n an 18- 1-inch Vertical	38.981286 ° 3 121.694958 ° -12		Y
34 14.91 14	.91 Supplementa	al DWR UCIP Field Study	WS M En	Inspector Comments: FS_ID:6602 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe has not been about should be removed from the levee second status of the should be removed from the levee second status of the should be removed from the levee second status of the should be removed from the levee, 3.5 feet below the crown. Siphon inch steel risers on both WS and LS should be sho	tion. lipe throu breakers oulders. \	properly. gh the s in 30-	38.979377° 3 121.691929° -12	8.979377° 1.691929°	

FS Date: 10/9/2012 3:11:33 PM

DWR ID: DWR_ST0002_01_f _ 2013_355

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway							Unit Miles	Inspection Start/End	Inspec	ctor
Unit No. 01 Sutter Bypass Levee Le					Left	22.12	10/08/2013 10/08/2013			
Levee Mile Start End	Category	Item	Location	Rating	Action/Comment			GPS Latitud	e/Longitude End	Issue No. Photo
35 14.91 14.91 Supplemental DWR UCIP LS M Inspector Comments: FS_ID:13784 38.9793		38.979377 ° 121.691929 ° -	38.979377 ° 121.691929 °							

It should be removed from the levee section.5/23/2013 Same as last inspection. FIELD_STRUCT_DESC: 16-inch steel pipe through the levee, 3.5 feet below the crown. Siphon breakers in 30inch steel risers on both WS and LS shoulders. Vertical pump on pile structure in stream (removed).

UCIP Comments: Pipe has not been abandoned properly.

FS Date: 5/23/2013

Crossing Status: Found

36 16.40 16.40 Earthen Animal Control LS C A1: Exterminate rodents and backfill and compact or 38.965675° 38.965675° 325 Levee -121.670967 ° -121.670967 ° En grout burrows. DWR ID: DWR_ST0002_01_s _ 2012_325 38.932476° 38.932476° 357

37 19.45 19.45 Supplemental DWR UCIP Field Study

LS M Inspector Comments: FS_ID:6615 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Determine type of abandonment for

concrete culvert.

FIELD STRUCT DESC: 1 of 3. 4-foot by 6-foot concrete box culvert through the levee, 26.0 feet below the crown. Slide gates in a concrete well on the waterward shoulder. Wooden flap gates and concrete headwall on the waterward end. Concrete steps and staff gage reading to 53.0 feet on the waterward slope. Originally included in O+M manual.

FS Date: 10/9/2012 3:28:00 PM

DWR ID: DWR_ST0002_01_f _ 2013_357

-121.635174 ° -121.635174 °

38.932510° 38.932510° 358

DWR ID: DWR_ST0002_01_f _ 2013_356

-121.635173 ° -121.635173 °

38 19.45 19.45 Supplemental DWR UCIP Field Study

LS M Inspector Comments: FS_ID:6612

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Determine type of abandonment for

concrete culvert.

FIELD_STRUCT_DESC: 1 of 3. 4-foot by 6-foot concrete box culvert through the levee, 26.0 feet below the crown. Slide gates in a concrete well on the waterward shoulder. Wooden flap gates and concrete headwall on the waterward end. Concrete steps and staff gage reading to 53.0 feet on the waterward slope. Originally included in

O+M manual.

FS Date: 10/9/2012 3:28:00 PM

DWR ID: DWR_ST0002_01_f _ 2013_358

Location LS: Land Side WS: Water Side CR: Crown

Rating

N : Not Inspected/Rated Minimally Acceptable Corrected : Acceptable but Monitor & Maintain U: Unacceptable

+ Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

	Waterway					Inspection Start/End	Inspect	or
	Unit No. 01 S	Left	22.12	10/08/2013 10/08/2013	Bob Duffey	y		
Levee Mile Start End Category	Category Item * Action/Comment					GPS Latitude/L	origitude	Issue No. Photo
³⁹ 19.45 19.45 Suppler	mental DWR UCIP Field Study	LS M En	Inspector Comments: FS_ID:6616 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Determine type of abandonment for concrete culverts. FIELD_STRUCT_DESC: 2 of 3. 4-foot by 6-foot concrete box culvert through the levee, 26.0 feet below the crown. Slide gates in a concrete well on the waterward shoulder. Wooden flap gates and concrete headwall on the waterward end. Concrete steps and staff gage reading to 53.0 feet on the waterward slope. Originally included in O+M manual. FS Date: 10/9/2012 3:31:00 PM		-121.635160 ° -12	1.635160°	359	
⁴⁰ 19.45 19.45 Suppler	mental DWR UCIP Field Study	LS M En	Inspector Comments: FS_ID:6613 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Determine type of abaconcrete culverts. FIELD_STRUCT_DESC: 2 of 3. 4-foot box culvert through the levee, 26.0 feet Slide gates in a concrete well on the wa Wooden flap gates and concrete headw waterward end. Concrete steps and sta 53.0 feet on the waterward slope. Origin O+M manual. FS Date: 10/9/2012 3:31:16 PM	by 6-foot below the terward s all on the ff gage re	nt for concrete crown. houlder. eading to	-121.635164°-12	3.932500 ° 1.635164 °	360
						DWR ID: DWR_ST000		
⁴¹ 19.46 19.46 Suppler	mental DWR UCIP Field Study	LS M En	Inspector Comments: FS_ID:6614 EP_NO: N/A Repair Type: Non-Urgent		-	38.932489 ° 3 -121.635153 ° -12	8.932489 ° 1.635153 °	361

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine type of

abandonment for concrete culverts.

FIELD_STRUCT_DESC: 3 of 3. 4-foot by 6-foot concrete box culvert through the levee, 26.0 feet below the crown. Slide gates in a concrete well on the waterward shoulder. Wooden flap gates and concrete headwall on the waterward end. Concrete steps and staff gage reading to 53.0 feet on the waterward slope. Originally included in

O+M manual.

FS Date: 10/9/2012 3:33:11 PM

DWR ID: DWR_ST0002_01_f _ 2013_361

Location LS: Land Side WS : Water Side CR : Crown Rating

M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Fall 2013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

		Jilit No. 01 Sut	ici i	Эур	ass Levee	LCIT	22.12	10/08/2013	Duffe	y
Levee Mile Start End	Category	Item	Location	Rating ** +	Action/Comment			GPS Latitude/I	_ongitude	Issue No. Photo
42 19.46 19.46	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6617 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment for concrete culverts. FIELD_STRUCT_DESC: 3 of 3. 4-foot by 6 box culvert through the levee, 26.0 feet below Slide gates in a concrete well on the waterward wooden flap gates and concrete headwall of waterward end. Concrete steps and staff gates 33.0 feet on the waterward slope. Originally O+M manual. FS Date: 10/9/2012 3:33:00 PM	6-foot cow the ward shoon the lage rea	oncrete crown. oulder. ading to	38.932460 ° 3 -121.635150 ° -12		362
43 19.46 19.46	Supplemental	DWR UCIP Field Study	LS		Inspector Comments: FS_ID:13796 EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment.5/23/2013 Same as last inspected in the levee, 4.0 feet below the crown. Siphon inch corrugated metal pipe riser on the water shoulder. Flap gate on the waterward end. DWR) FS Date: 5/23/2013	pection pipe the n break erward	rough er in 36-	-121.635085° -12		363 Y
44 19.46 19.46	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6618 EP_NO: 3165 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment. FIELD_STRUCT_DESC: 10-inch drainage of the levee, 4.0 feet below the crown. Siphon inch corrugated metal pipe riser on the water shoulder. Flap gate on the waterward end. DWR) FS Date: 10/9/2012 3:37:19 PM	pipe the n break erward	rough er in 36-	-121.635085 ° -12	8.932423 ° 1.635085 °	364
⁴⁵ 20.64 20.64	Earthen Levee	Encroachments	LS	U En	BU : Building			38.918147 ° 3 -121.624545 ° -12 DWR ID: DWR_ST000	8.918147 ° 1.624545 °	10 Y
⁴⁶ 20.91 20.91	Earthen Levee	Animal Control	LS	A Ma	A3 : No rodents visible, but rodent burrows backfill and compact or grout burrows.	visible;		38.914568 ° 3 -121.623260 ° -12 DWR ID: DWR_ST000		Υ

Location	
LS : Land Side	
WS : Water Side	
CR : Crown	

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

Levee Mile Report Line	6					
Start Levee Mile	1.13					
End Levee Mile	1.13					
Location	Land Side					
Category	Supplemental					
Item	DWR UCIP Field Study					
Pump on metal pier on WS slope.						

UCIP_7419.jpg

Levee Mile Report Line	7
Start Levee Mile	3.60
End Levee Mile	3.60
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of rodent activity along landside slope.

rduffey_f_20130919_117.JPG

7	
Levee Mile Report Line	9
Start Levee Mile	3.61
End Levee Mile	3.61
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study
Abandoned pumphouse	and sump on LS toe.







UCIP_7421.jpg

+ Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

Levee Mile Report Line	12	
Start Levee Mile	4.97	
End Levee Mile	4.99	
Location	Land Side	
Category	Earthen Levee	
Item	Animal Control	
View of the grouted rodent holes.		

rduffey_f_20131015_086.JPG

Levee Mile Report Line	15
Start Levee Mile	10.44
End Levee Mile	10.44
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study

Gasline markers on WS shoulder.

UCIP	7429.jpg

Levee Mile Report Line	18
Start Levee Mile	11.00
End Levee Mile	11.00
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study

Pumping plant on LS toe.









Location LS: Land Side WS : Water Side CR : Crown

M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monite : Corrected : Acceptable but Monitor & Maintain

+ Issue Type

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Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

27		
11.01		
11.01		
Land Side		
Supplemental		
DWR UCIP Field Study		
Siphon breaker in 36-inch CMP riser on WS shoulder. Pipe visible at siphon breaker.		

Levee Mile Report Line	31
Start Levee Mile	13.54
End Levee Mile	13.54
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study

Pump on Pier on WS toe.

UCIP_2886.jpg

UCIP_7441.jpg

Levee Mile Report Line	33	
Start Levee Mile	14.70	
End Levee Mile	14.70	
Location	Land Side	
Category	Supplemental	
Item	DWR UCIP Field Study	
Siphon breaker in PVC standpipe on LS shoulder		

and Concrete riser in adjacent field.

UCIP_2889.jpg







A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monite : Corrected : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

Levee Mile Report Line	35	
Start Levee Mile	14.91	
End Levee Mile	14.91	
Location	Land Side	
Category	Supplemental	
Item	DWR UCIP Field Study	
Steel riser on LS shoulder.		

UCIP_7451.jpg

Levee Mile Report Line	37
Start Levee Mile	19.45
End Levee Mile	19.45
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study

Pumphouse on LS toe.

UCIP	_2906.jpg

Levee Mile Report Line	43	
Start Levee Mile	19.46	
End Levee Mile	19.46	
Location	Land Side	
Category	Supplemental	
Item	DWR UCIP Field Study	
36-inch CMP riser on WS shoulder.		

UCIP_7454.jpg







Location LS: Land Side WS : Water Side CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monit : Corrected : Acceptable but Monitor & Maintain

+ Issue Type

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	22.12	10/08/2013 10/08/2013	Bob Duffey

Levee Mile Report Line	45
Start Levee Mile	20.64
End Levee Mile	20.64
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of the building next levee.	to the landside toe of the

rduffey_f_20130919_119.jpg

Levee Mile Report Line	46	
Start Levee Mile	20.91	
End Levee Mile	20.91	
Location	Land Side	
Category	Earthen Levee	
Item	Animal Control	
View of the grouted redent holes		

View of the grouted rodent holes.

rduffey_f_20131015_087.JPG



